Tips for generating SeaBASS files from Microsoft Excel worksheets

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We assume that the Excel data are presented as a matrix with the top row providing column names.

(1) Make sure all column names follow the standardized SeaBASS naming convention, as described in the URL provided below. Geophysical units are required in all SeaBASS files, so one might use the second row to provide the column units (again, standardized SeaBASS units are required).

```
http://seabass.gsfc.nasa.gov/cgi-bin/stdheaders.cgi
```

(2) Make sure that latitudes (\pm 90) and longitudes (\pm 180) are in decimal degrees. Also, make sure that dates and times are SeaBASS-friendly and in UTC. Common column date and time formats include:

YYYYMMDD	HH:MM:SS
YYYY	HH
MM	MM
DD	SS
JJJ	

(3) To export the file to ASCII text, select $File \rightarrow Save \ As \dots$ and select one of the following types:

```
comma-delimited (CSV)
text, tab-delimited (TXT)
formatted text, space-delimited (PRN)
```

(4) Add complete SeaBASS headers to each data file. A template is available via the URL provided below. If using this template, make sure to complete each blank header:

```
http://seabass.gsfc.nasa.gov/docs/header template.txt
```

Make sure to update the /delimiter header according to your choice of output file type.

- (5) Visually verify the file using a **text editor**, not using **Excel**.
- (6) Further verify the file format by submitting the file to *FCHECK*, which is described in the following URL. Files must pass *FCHECK* prior to submission to SeaBASS.

```
http://seabass.gsfc.nasa.gov/fcheck desc.html
```

Note: the use of *FCHECK* does not constitute a submission to SeaBASS.

(7) Tips on output type selection:

The standard SeaBASS headers for column names and units are /fields and /units, respectively, both of which require multiple entries to be separated by commas, e.g.:

```
/fields=date, time, lat, lon, depth, chl, ...
/units=yyyymmdd, hh:mm:ss, degrees, degrees, m, mg/m^3, ...
```

Therefore, CSV is the most convenient output format, as by default, commas separate multiple column names and units (the other two output formats require the manual inclusion of commas). PRN prohibits the use of white space in the data column (for PRN, white space is the column delimiter).

(8) Other tips and troubleshooting ideas:

- Make sure headers do not include white space.
- Headers and the data matrix must not have quotation marks ("").
- When using CSV, the data matrix must not have trailing commas (,) at the end of each row.
- For all file types, make sure rows do not have visible trailing carriage returns (<cr>,^M).

The latter three all occur on occasion when exporting data from Excel into ASCII text.

(9) Don't hesitate to contact the SeaBASS Administrator with additional questions:

```
seabass@seabass.gsfc.nasa.gov
```